

embodiments of FIGS. 2 and 3. In the case of FIG. 2, the cap 142 is integral with a cover 144 which extends between the cap 142 and the drive mechanism 124 or bracket 14. The caps 142 and 242 are secured to the distal ends of the screw 22 and the guide rod 12 to maintain stability and the parallel relationship between the screw 22 and the guide rod 12. 5

The guide rod 12 extends rigidly rearward from the bracket 14 or 214 and is made of any standard metal. The guide rod 12 can attach either directly to the bracket 14, 114 or 214 or to the drive mechanism 24, 124 or 224 which is fixedly attached to the bracket 14, 114 or 214. The guide rod 12 could be slotted at either end to facilitate attachment to the bracket 14, 114 or 214 or to the bearing caps 142 or 242. 10

The pedal support 16, 116 or 216 which may be formed as a casting, forging or stamping, and is designed to move slidably along the guide rod 12. Preferably the one piece member defining the pedal lever 218 and the support 216 is molded of an organic polymeric material, which significantly reduces weight. 15

The drive mechanism 24, 124 or 224 may be attached to a motor 26 which can be located at any position within the front of the car so long as a connection 46 can be made to the drive mechanism 24, 124 or 224. The motor can be any standard motor which can be activated by an electric signal generated by an operator. 20

The use of the potentiometer as a signal generator 32 or 132 is an effective manner of generating a signal and such is disclosed in U.S. Pat. No. 5,819,593 which is assigned of the present invention. The signal generator 32 or 132 responds to pedal lever 18, 118 or 218 movement by generating a signal which is used by a corresponding device, such as the vehicle computer and/or the engine controller. 25

The invention has been described in an illustrative manner, and it is to be understood that the terminology which has been used is intended to be in the nature of words of description rather than of limitation. 30

Obviously, many modifications and variations of the present invention are possible in light of the above teachings. It is, therefore, to be understood that within the scope of the appended claims, wherein reference numerals are merely for convenience and are not to be in any way limiting, the invention may be practiced otherwise than as specifically described. 35

What is claimed is:

1. An adjustable pedal assembly comprising;
a guide rod (12),
a pedal support (16, 116 or 216) surrounding and slidably supported on said guide rod (12), 40

a pedal lever mounted on said support (16, 116 or 216) for movement in a plane parallel to said rod (12) independent of movement of said pedal support (16, 116, or 216) along said guide rod (12),

a screw (22) for driving said pedal support (16, 116 or 216) along said guide rod (12) to adjust the position of said pedal lever in said plane,

said adjustable pedal assembly (10, 110 and 210) characterized by said screw (22) being external to and parallel to said guide rod (12),

said pedal lever being movable about a pivot, said pivot being independent of said screw whereby said screw is free of loads at said pivot resulting from pivotal movement of said pedal lever about said pivot.

2. An assembly as set forth in claim 1 including a bracket (14 or 214) for attachment to a motor vehicle, said guide rod (12) being fixed to and extending from said bracket (14 or 214). 15

3. An assembly as set forth in claim 2 wherein said pedal lever is pivotally attached to said support (16 or 116). 20

4. An assembly as set forth in claim 3 including a signal generator (32 or 132) supported by said pedal support (16 or 116) and responsive to movements of said pedal lever for generating an electrical signal. 25

5. An assembly as set forth in claim 2 wherein said bracket (214) includes a connection (34) for rotatably supporting said bracket (214) on a vehicle in response to pivotal movement of said pedal lever. 30

6. An assembly as set forth in claim 5 wherein said pedal lever and said support (216) are defined by an integral member threadedly engaging said screw (22) and in sliding engagement with said guide rod (12) and extending downwardly from said guide rod (12) to a pedal end. 35

7. An assembly as set forth in claim 2 including a drive mechanism (24, 124 or 224) for rotating said screw (22). 40

8. An assembly as set forth in claim 7 wherein said drive mechanism (24 or 124) is disposed on said guide rod (12) adjacent said bracket (14). 45

9. An assembly as set forth in claim 7 wherein said bracket (214) is defined by a housing and said drive mechanism (224) is disposed in said housing of said bracket (214). 50

10. An assembly as set forth in claim 2 wherein said screw (22) and said guide rod (12) extend from said bracket (142 or 242) to distal ends, and including a cap or (142 or 242) interconnecting said distal ends. 55

11. An assembly as set forth in claim 1 wherein said guide rod (12) is larger in the transverse direction than said screw (22). 60

* * * * *